

ABSTRACT OF THE DISCLOSURE

An interface device and interface device control method that switches a transmission rate to enable high-speed transmission when necessary. In devices (nodes) provided with an interface device, a transmission rate control circuit decreases the frequency of a clock signal to only enable low-speed transmission operations during low-speed transmission and when a transfer operation is not being performed. A node requiring switching to a high-speed transmission rate negotiates with each node included in a route to a transfer destination and reads the device information stored in the register to confirm whether or not each node has a transmission capacity applicable for high-speed transmission. Then, when the transmission capacity is applicable for high-speed transmission, the transmission rate control circuit increases the frequency of the clock signal to change the operating speed of its node and each of the nodes requiring the switching of the transmission rate to high-speed transmission.